BookletChartTM

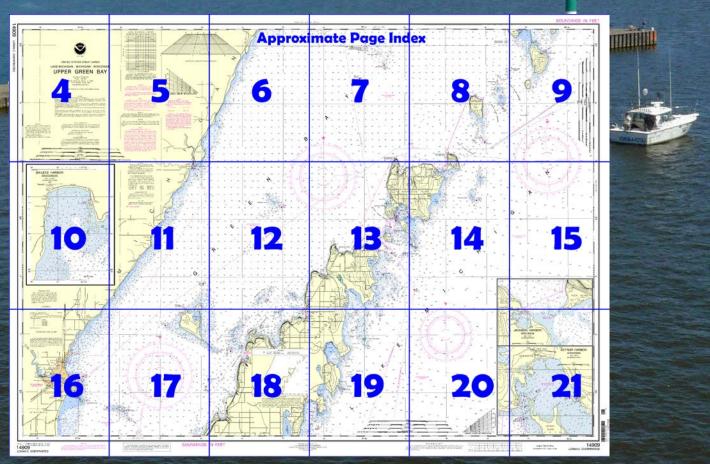
Upper Green Bay



A reduced-scale NOAA nautical chart for small boaters When possible, use the full-size NOAA chart for navigation.



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



Published by the National Oceanic and Atmospheric Administration National Ocean Service Office of Coast Survey

<u>www.NauticalCharts.NOAA.gov</u> 888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart[™]?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

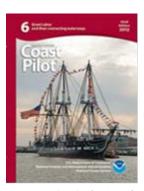
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=149 <a href="http://www.nauticalcharts.noaa.gov/nsd/searchbycharts.noaa



(Selected Excerpts from Coast Pilot)
Baileys Harbor, about 14 miles north of
Whitefish Point, is a small bay protected
on the east by a point that extends east,
then south, from shore. Shoals that extend
1 mile South from the point are marked on
the southwest side by a buoy. A shoal with
a least depth of 1 foot extends from shore
on the west side of the harbor entrance.
Shoals extend about 0.25 mile off the east
shore of the harbor and 0.5 mile off the
north and west shores. Baileys Harbor

Directional Light (45°04.2'N., 87°07.2'W.), at the northwest corner of the harbor, shows a higher intensity beam on **340°** which marks the best water into the harbor. Vessels approaching Baileys Harbor should keep

1.5 miles offshore until the white sector is visible. A lighted bell buoy 3 miles south-southeast of the light, in the white sector, marks the harbor entrance.

Baileys Harbor is sheltered and affords good anchorage, but is subject to considerable surge during heavy seas. Vessels should not anchor nearer than 0.5 mile of the north shore of the harbor, as the water is shallow and the sea that sets in during S gales is only partially broken by the shoals outside. The best holding ground is on the east side of the harbor. A yacht club on the northeast side of Baileys Harbor provides transient berths, gasoline, diesel fuel, water, ice, electricity, and sewage pumpout. Emergency repairs are available.

Moonlight Bay opens on the northeast side of the point which forms the east side of Baileys Harbor. The bay has deep water to just inside the entrance and affords fairly good anchorage with protection from all but E to S winds.

Cana Island Light (45°05.3'N., 87°02.8'W.), 83 feet above the water, is shown from a white conical tower on a small island connected to shore by a narrow neck 1.5 miles northeast of Moonlight Bay. From the light N to North Bay, the shore is clear except for numerous submerged net stakes extending about 0.7 mile offshore. In 1995, a dangerous wreck was reported 2 miles north-northeast of Cana Island Light in about 45°06'52.7"N., 87°00'52.0"W.

North Bay, 3 miles north of Cana Island Light, has a small area of deep water near its mouth and affords fair anchorage for small craft with protection from all but E winds. Entrance to the bay is constricted by shoals that extend off each entrance point. The shoals are marked at the ends by buoys. Vessels should take care to avoid abandoned net stakes in the entrance.

From the point that encloses the east side of the North Bay, the shore extends north to Rowley Bay, enclosed on the east by a point on which is located Newport State Park. **Rowley Bay** affords only limited shelter, and the anchorage is not good. The north end of the bay is fouled by many rocky spots covered 2 to 14 feet.

The approach to Rowley Bay is obstructed by numerous shoals. Four Foot Shoal, 3 miles long north and south, lies with its north end 1.4 miles south of the point which encloses the east side of the bay. A bank with numerous rocks awash is on the south end of the shoal, and the north end of the shoal has limiting depths of 2 to 6 feet. Buoys mark the west side and south end of the shoal. A shoal with rocks awash near the inner end and a depth of 11 feet near the outer end extends 1.1 miles south from Newport State Park and is marked by a buoy at the outer end. A detached shoal, marked on the south side by a buoy, has 2- and 9-foot spots 1 mile southwest of Newport State Park. A shoal with a least depth of 1 foot extends from shore west of the north end of Four Foot Shoal and is marked at the outer end by a buoy. Rowley Bay may be entered west of Four Foot Shoal, between it and the shore to west. This passage is obstructed by a detached 9-foot shoal west of the midpoint of Four Foot Shoal; the shoal is marked by a buoy on the east side. The bay may also be entered north of Four Foot Shoal.

Sand Bay is a small indentation on the west side of Rowley Bay 1.4 miles south of the head. Slips on the west side of the bay used by commercial fishermen are protected by breakwalls and provide shelter in all winds. The slips have depths of about 6 feet. A resort marina on the west side of the bay provides berths, electricity, gasoline, and sewage pump-out. Waters from Rowley Bay North to Porte des Morts Passage are rendered foul by an irregular bottom with shallow banks and detached spots.

U.S. Coast Guard Rescue Coordination Center 24 hour Regional Contact for Emergencies

RCC Cleveland

Commander

9th CG District Cleveland, OH

(216) 902-6117



Bouy 1 marks the entrance to the harbor, and may be reocated without notice due to shifting conditions.

Detroit Harbor positions are approximate and may be relo-cated without prior notice due to continually shifting conditions.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been mitted from this chart.

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area Cable Area

Additional uncharted submarine pipelines an submarine cables may exist within the area of this chart. Not all submarine pipelines and sub-marine cables are required to be buried, and caution when operating vessels in depths o water comparable to their draft in areas when pipelines and cables may exist, and when anchoring, dragging, or trawling. Covered wells may be marked by lighted or

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Escanaba, MI Green Bay, WI Sister Bay, WI WXN-69

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.
During some winter months or when endan-

gered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution. Station positions are shown thus:

(Accurate location) o(Approximate location)

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1902 must be corrected an average of 0.328" southward and 0.692" westward to agree with this chart.

Low Water Datum, which is the plane of reference for the levels shown on the above hydrograph, is also the plane of reference for the charted depths. If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.

Navigation regulations are published in Chapter 2, U.S Coast Pilot 6. Additions or revisions to Chapter 2 are pub-ished in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Com-mander, 9th Coast Guard District in Cleveland, Ohio or at he Office of the District Engineer, Corps of Engineers i

etroit, Michigan. Refer to charted regulation section numbers

Table of Selected Chart Notes

NO-DISCHARGE ZONE, 40 CFR 140

NO-DISCHARGE ZONE, 40 CFR 140

This chart falls entirely within the limits of a No-Discharge Zone (NDZ). Under the Clean Water Act, Section 312, all vessels operating within a No-Discharge Zone (NDZ) are completely prohibited from discharging any sewage, treated or untreated, into the waters. Commercial vessel sewage shall include graywater. All vessels with an installed marine sanitation device (MSD) that are navigating, moored, anchored, or docked within a NDZ must have the MSD disabled to prevent the overboard discharge of sewage (treated or untreated) or install a holding tank. Regulations for the NDZ are contained in the U.S. Coast Pilot. Additional information concerning the regulations and requirements may be obtained from the Environmental Protection Agency (EPA) web site: http://www.epa.gov/oww/oceans/vessel_sewage/vsdnozone.html.

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

NOTE D

Mariners are warned that numerous uncharted stakes and fishing structures, some submerged, may exist in the area of this chart. Such structures are not charted unless known to be permanent.

CAUTION

Due to periodic high water conditions in the Great Lakes, some features charted as visible at Low Water Datum may be submerged particularly in the near shore areas. Mariners should proceed with caution.

mended by the Lake Carriers Association and the Canadian Shipowners Association.

CAUTION

POTABLE WATER INTAKE

Vessels operating in fresh water lakes or rivers shall not discharge sewage, or ballast, or bilge water within such areas adjacent to domestic water intakes as are designated by the Commissioner of Food and Drugs (21 CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplementa

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR

SOURCE DIAGRAM

Most of the hydrography identified by the letter "|" was surveyed by the U.S. Army Corps of Engineers prior to 1974. Other outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels currently maintained by the U.S. Army R Corps of Engineers are periodically resurveyed and are not shown on this Corps of Engineers are periodically record to Chapter 1, United States Coast Pilot.

LORAN-C FREQUENCY
PULSE REPETITION INTERVAL
8970
STATION TYPE DESIGNATORS: (N
ietter designators)
M Secondary
Y Secondary
Y Secondary
Z Secondary
Z Secondary Loran-C correction tables published by the National Geospatia-Intelligence Agency or others should not be used with this chart. The lines of position shown have been adjusted based on survey data. Every effort has been made to meet the 1/x nautical mile accuracy criteria established by the U.S. Coast Guard. Mariners are cautioned not to rely solely on the lattices in inshore waters. RATES GENERAL EXPLANATION 8970-X SIHT NO .700 (Not CHART Microseconds individual station 100kHz

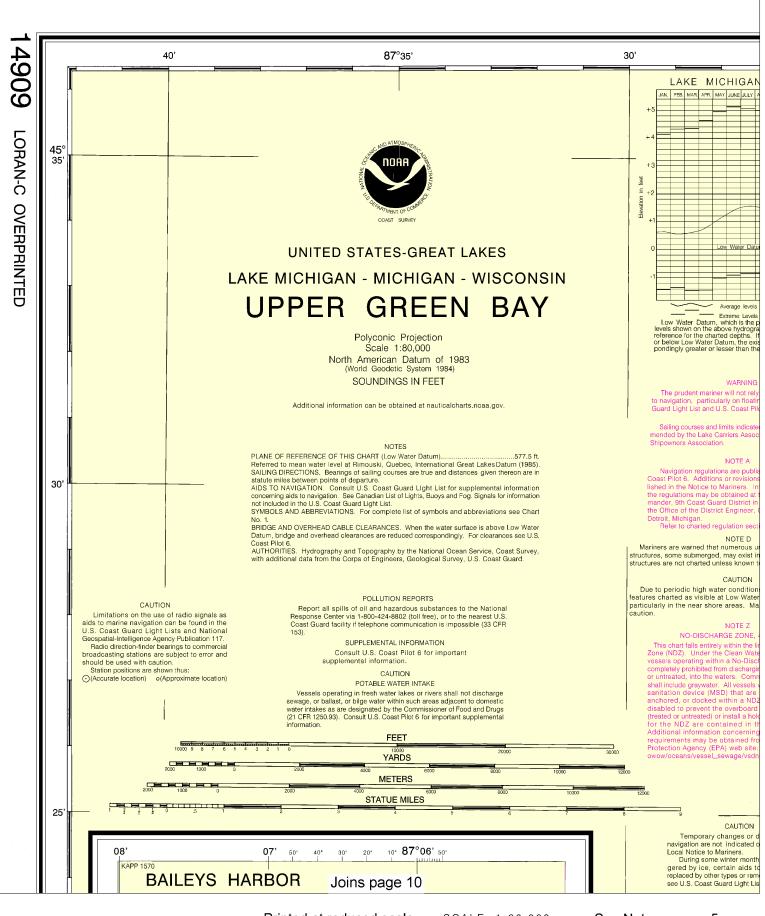
SAILING DIRECTIONS. Bearings of sailing courses are true and distances given thereon are in statute miles between points of departure.

SYMBOLS AND ABBREVIATIONS. For complete list of symbols and abbreviations see Chart

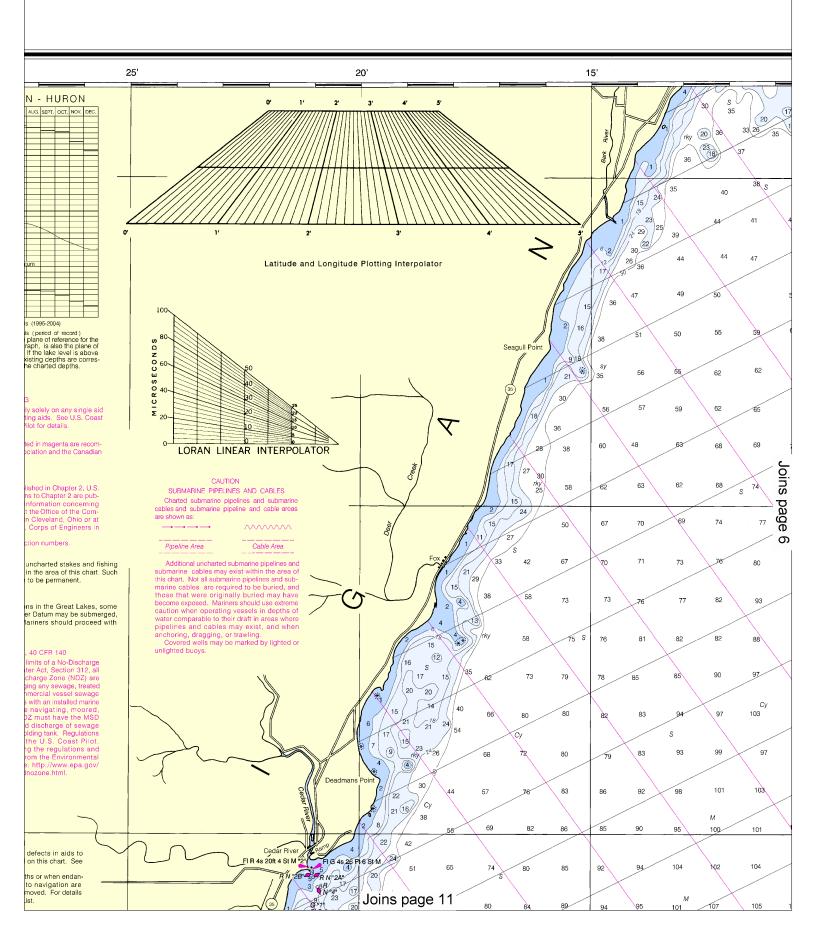
AUTHORITIES. Hydrography and Topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard.

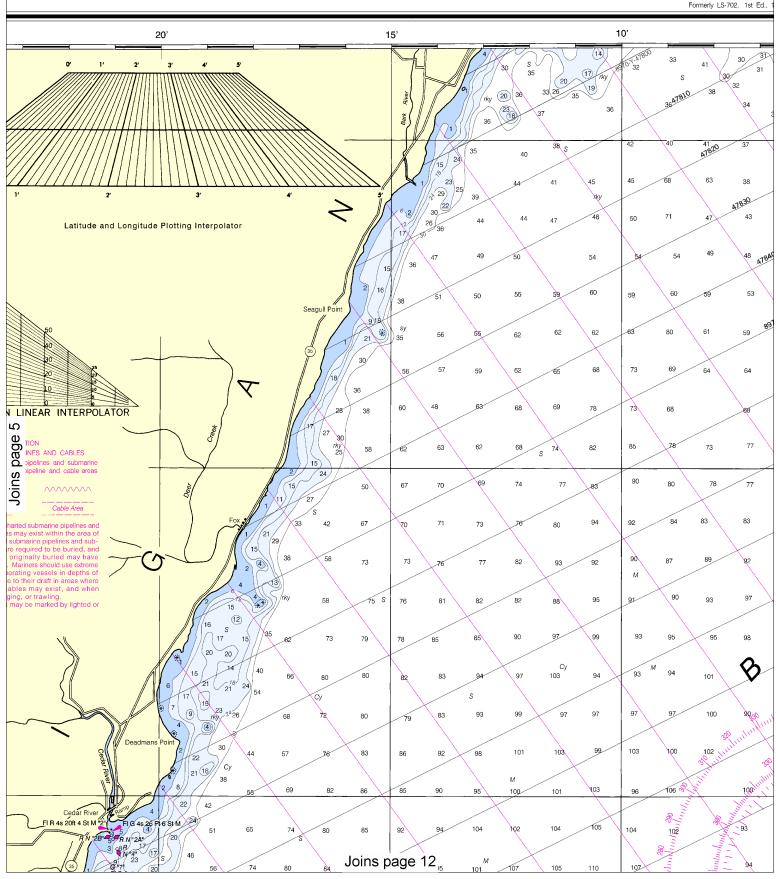
BRIDGE AND OVERHEAD CABLE CLEARANCES. When the water surface is above Low Water Datum, bridge and overhead clearances are reduced correspondingly. For clearances see U.S. Coast Pilot 6.

AIDS TO NAVIGATION. Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation. See Canadian List of Lights, Buoys and Fog. Signals for information not included in the U.S. Coast Guard Light List.



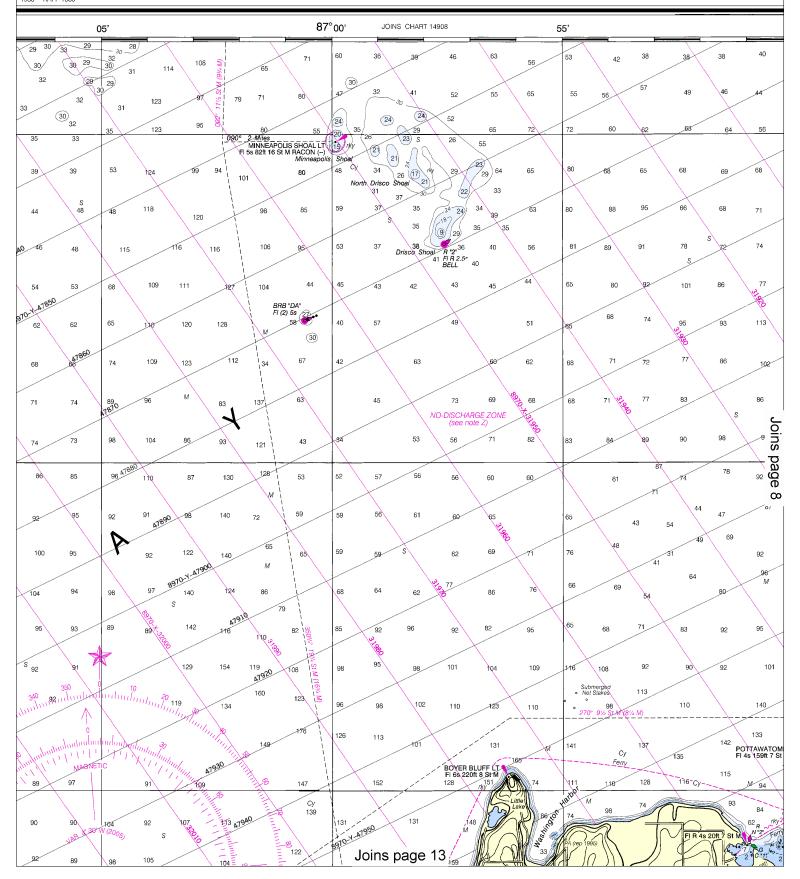


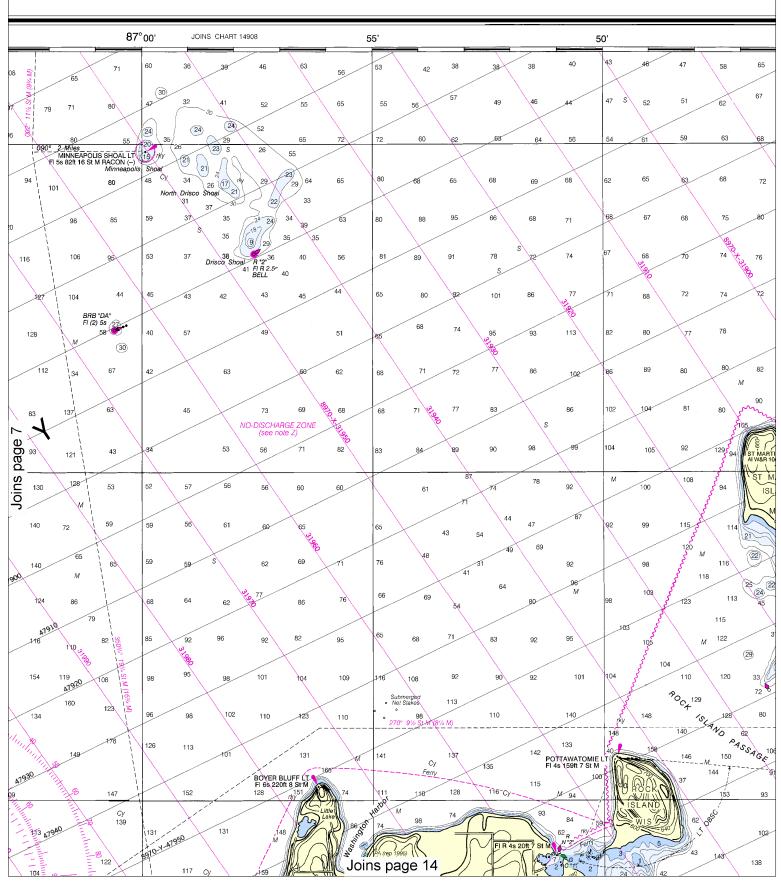








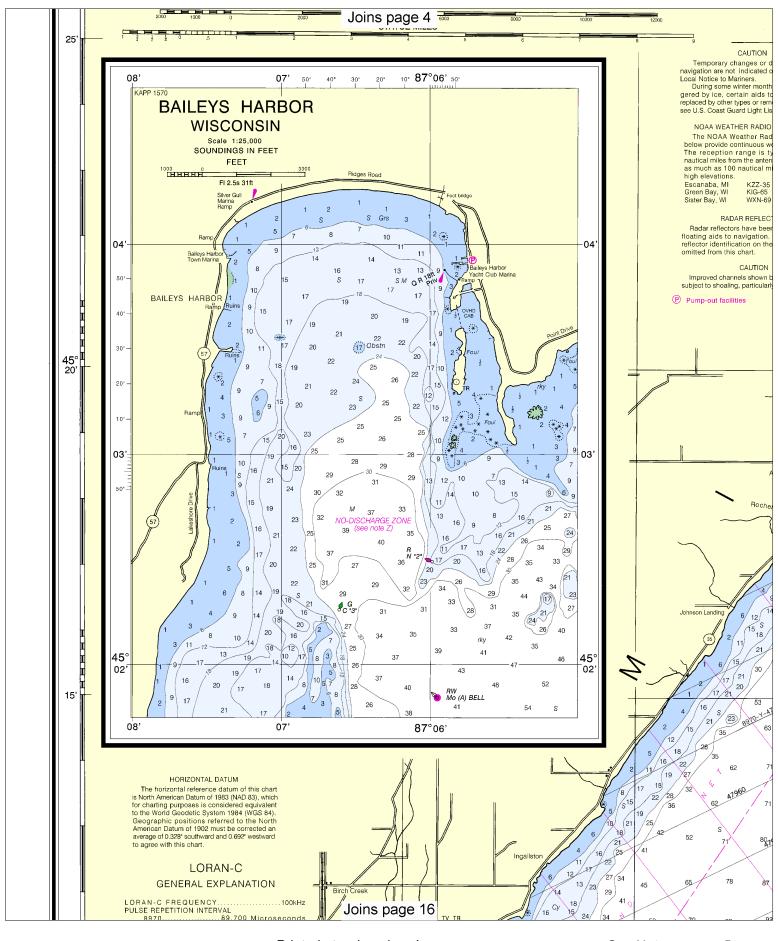


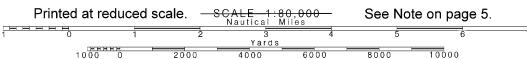


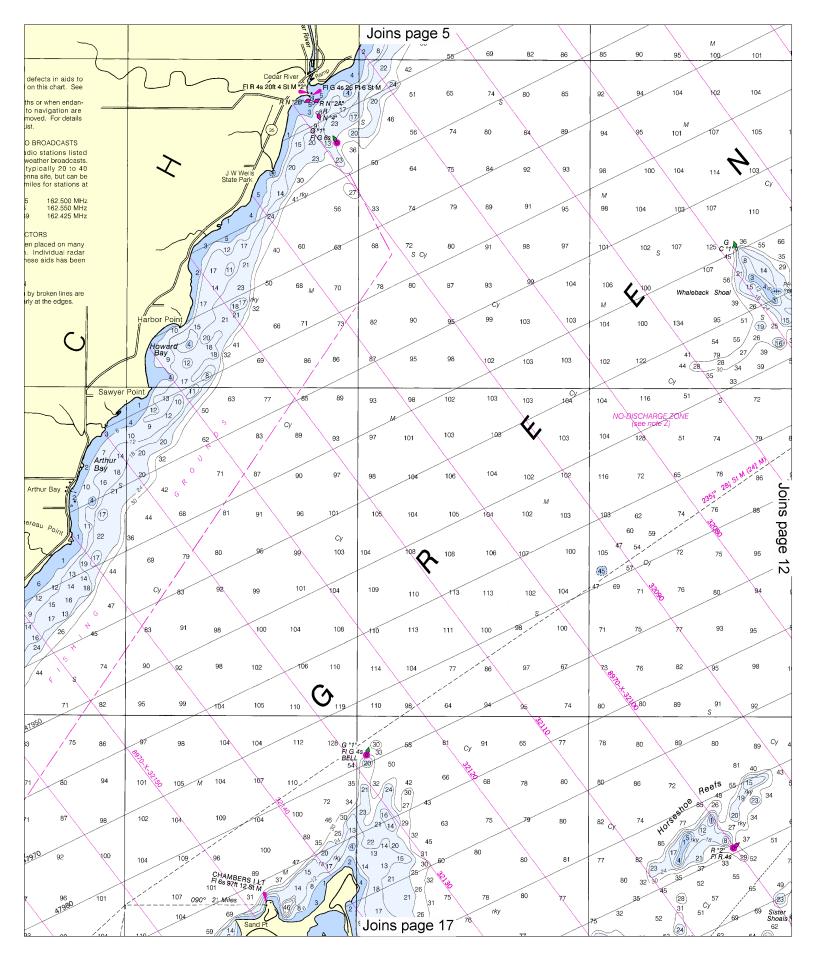


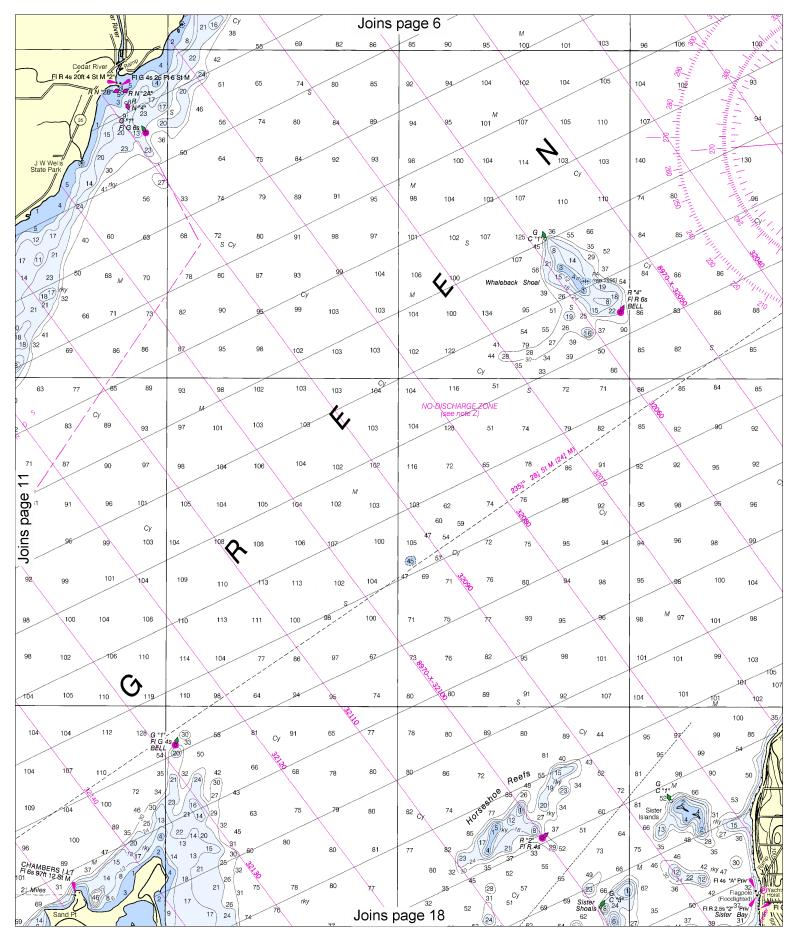


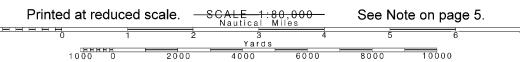
SOUNDINGS IN FEET 86° 35' 40' 45' Little Summer Island Shoal ° 35' 8970-Y-A7900 33 Harbor F) 4s 38ft 6 St M 76 47920 Poverty Island Shoal (13) 29) 54 31 (20) 39 20 40 Gravelly Island M 50 Shoals POLERTY Gravelly Island 2 STATUE MILES METERS YARDS 30' MARTIÑ 103 41960 Cy & rky 73 157 hadradadadadadada 36 St Martin I Shoals R 53 MAGNETIC 30 39 8970-Y-48000 25' Joins page 15

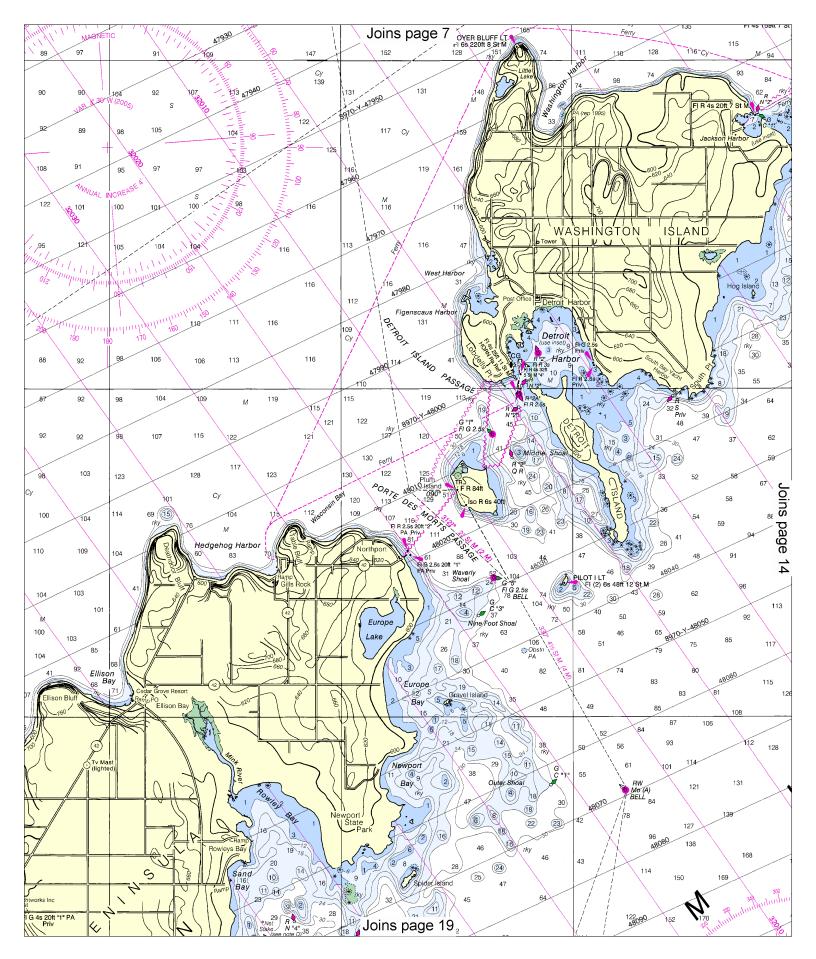


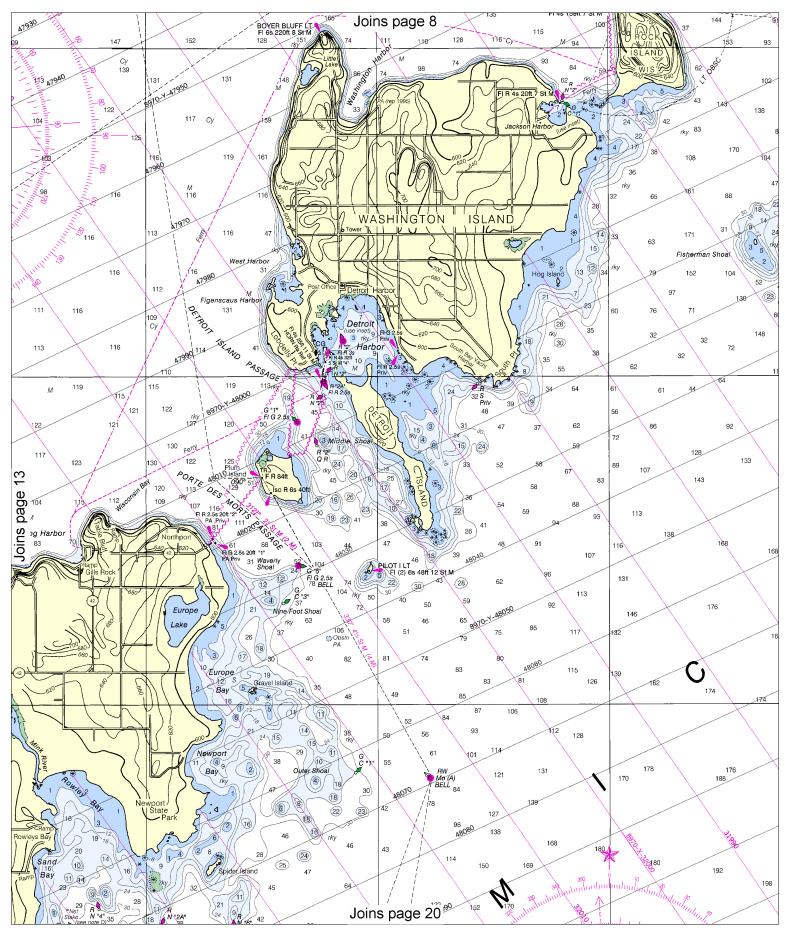




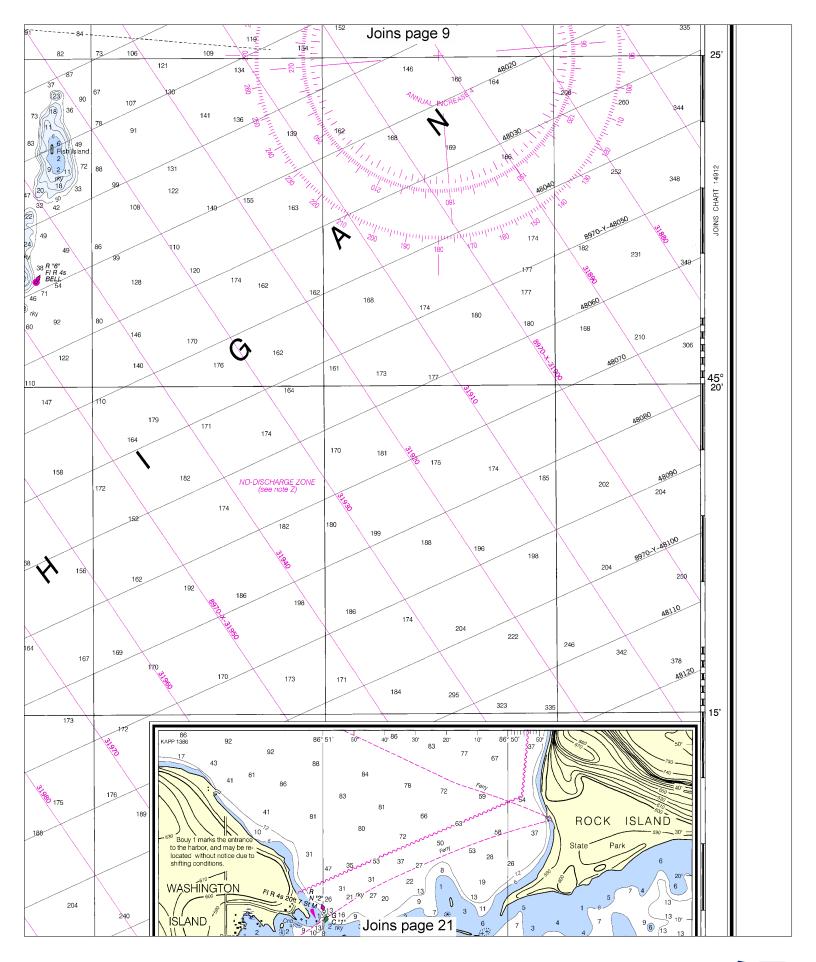


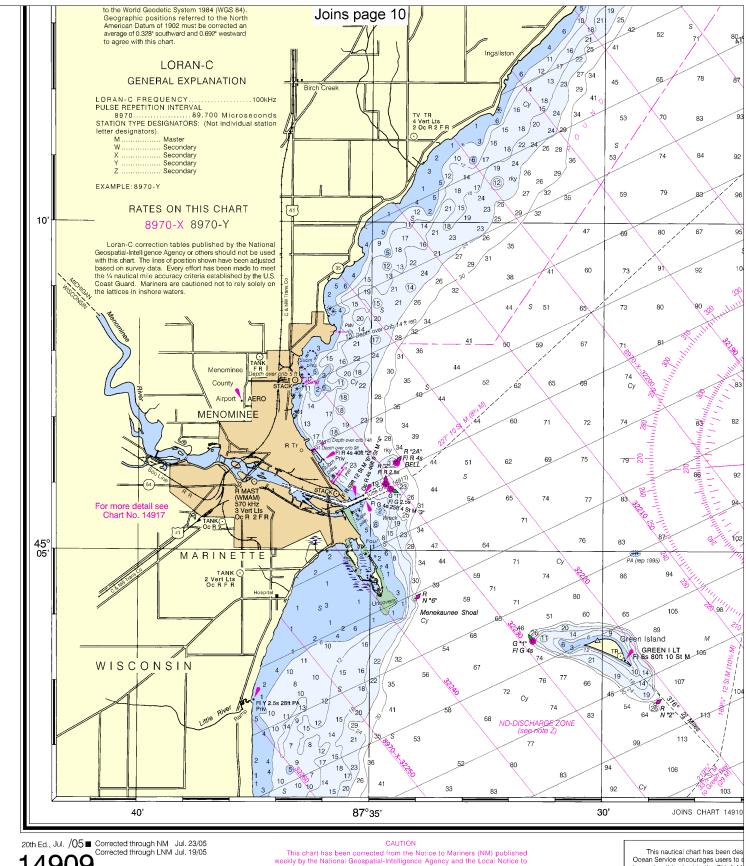








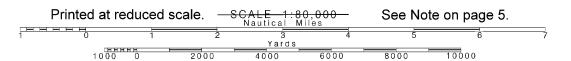


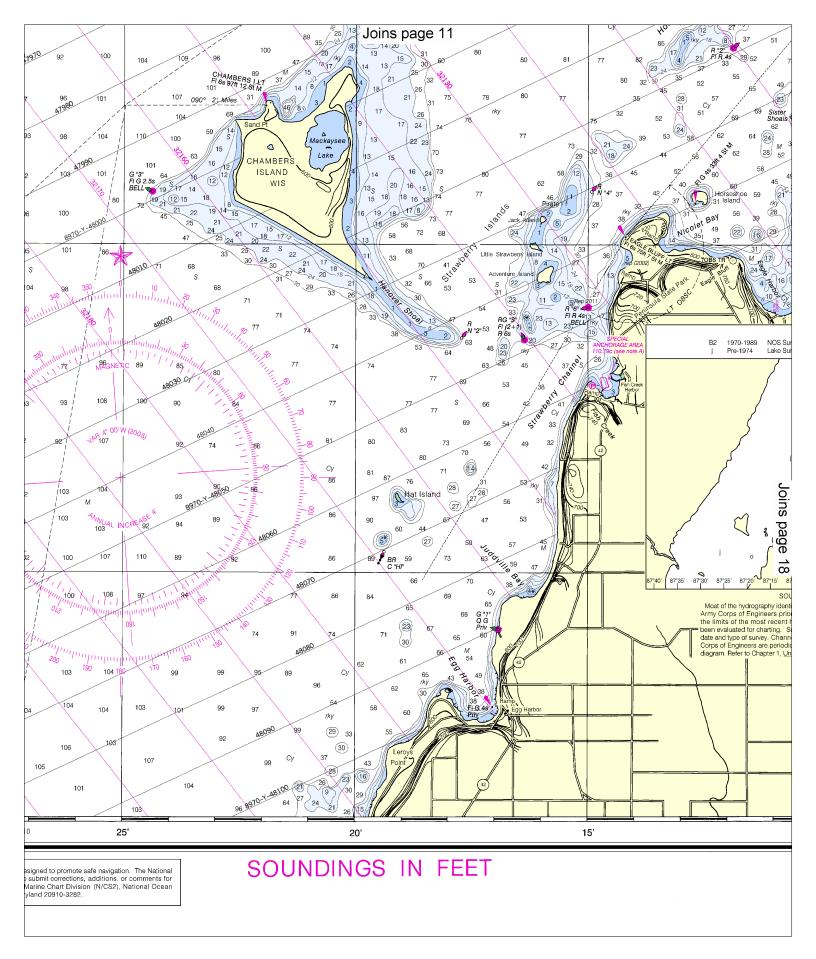


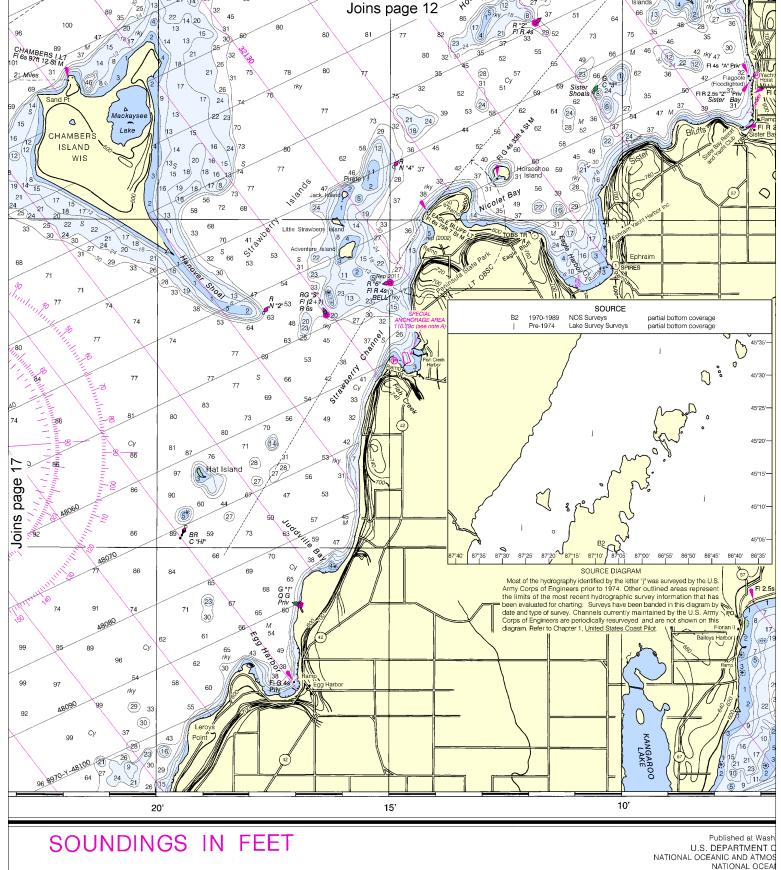
14909 LORAN-C OVERPRINTED

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

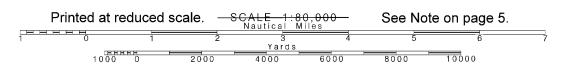
Ocean Service encourages users to s improving this chart to the Chief, Ma Service, NOAA, Silver Spring, Maryl

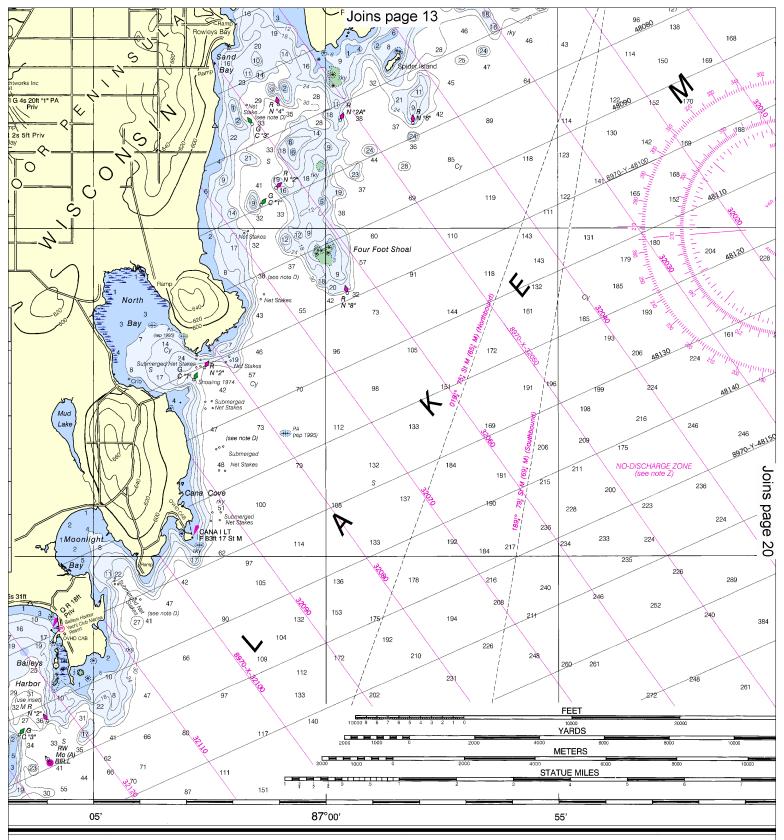






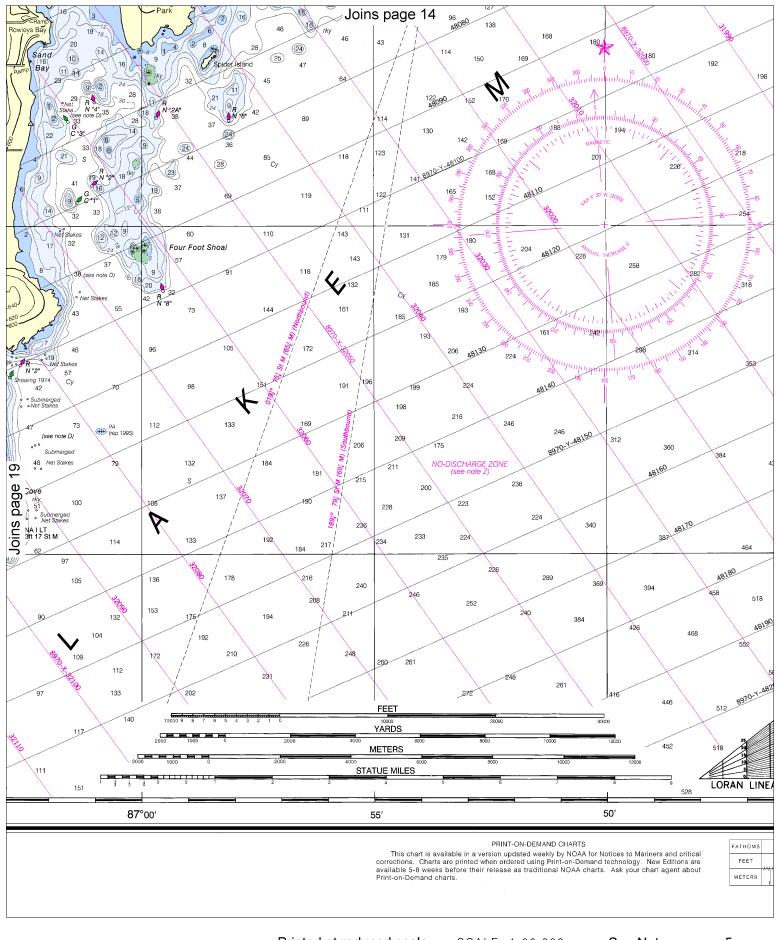
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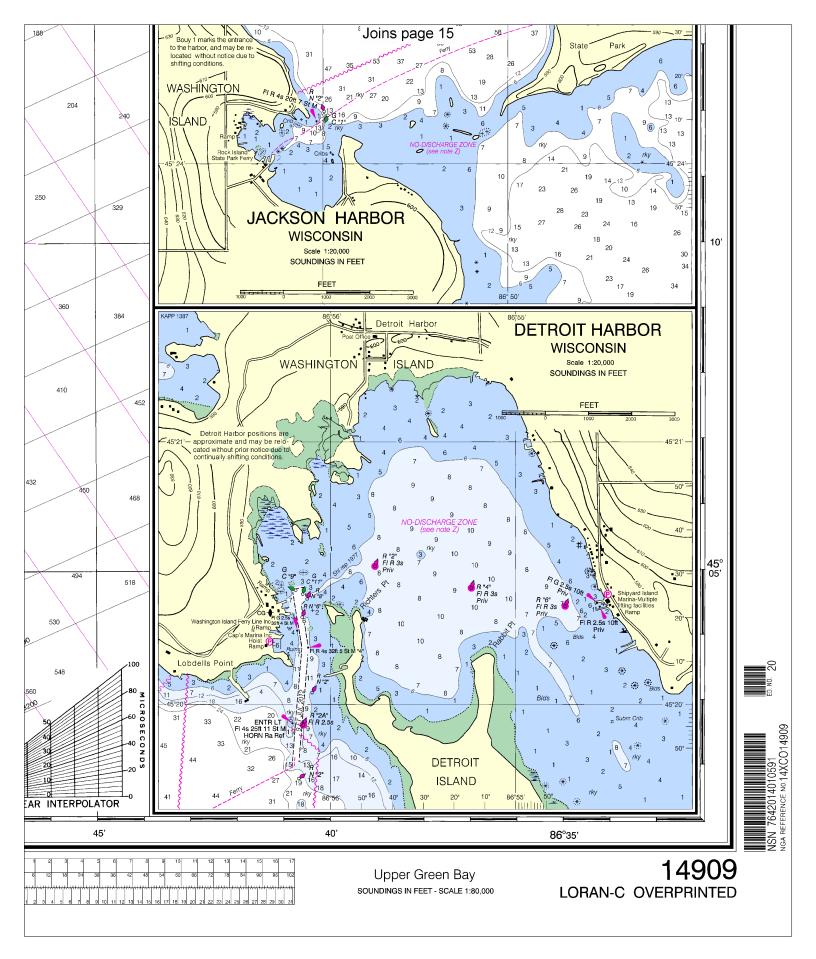


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This chart is available in a version updated weekly by NOAA f
corrections. Charts are printed when ordered using Print-on-Dema
available 5-8 weeks before their release as traditional NOAA ch
Print-on-Demand charts.









VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here. Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of

Emergency; Number of People on Board.

- · Release transmit button.
- Wait for 10 seconds If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

http://www.nws.noaa.gov/nwr/

Quick References

Nautical chart related products and information — http://www.nauticalcharts.noaa.gov

Online chart viewer — http://www.nauticalcharts.noaa.gov/mcd/NOAAChartViewer.html

Report a chart discrepancy — http://ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx

Chart and chart related inquiries and comments — http://ocsdata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs

Chart updates (LNM and NM corrections) — http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html

Coast Pilot online — http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm

Tides and Currents — http://tidesandcurrents.noaa.gov

Marine Forecasts — http://www.nws.noaa.gov/om/marine/home.htm

National Data Buoy Center — http://www.ndbc.noaa.gov/

NowCoast web portal for coastal conditions — http://www.nowcoast.noaa.gov/

National Weather Service — http://www.weather.gov/

National Hurrican Center — http://www.nhc.noaa.gov/

Pacific Tsunami Warning Center — http://ptwc.weather.gov/

Contact Us — http://www.nauticalcharts.noaa.gov/staff/contact.htm



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This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.

